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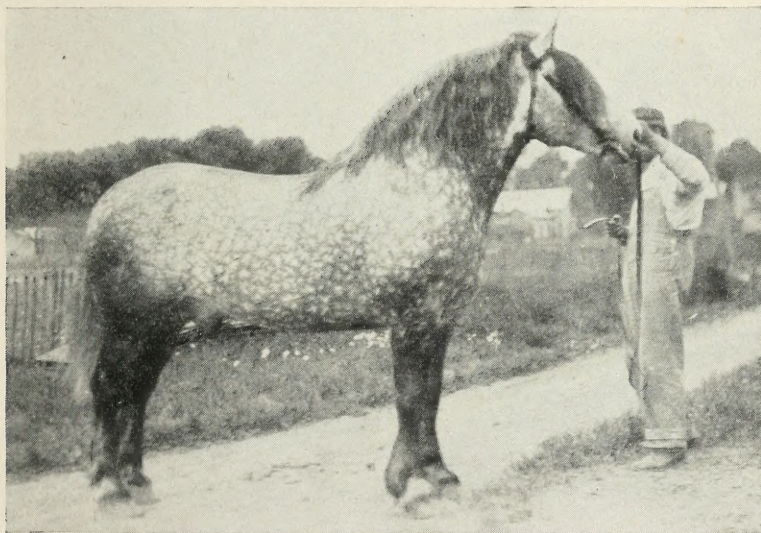
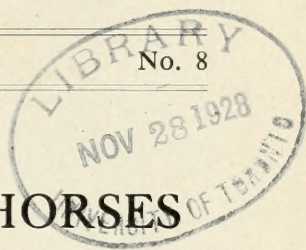
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No. 8

## JUDGING OF DRAFT HORSES

BY W. H. PALMER



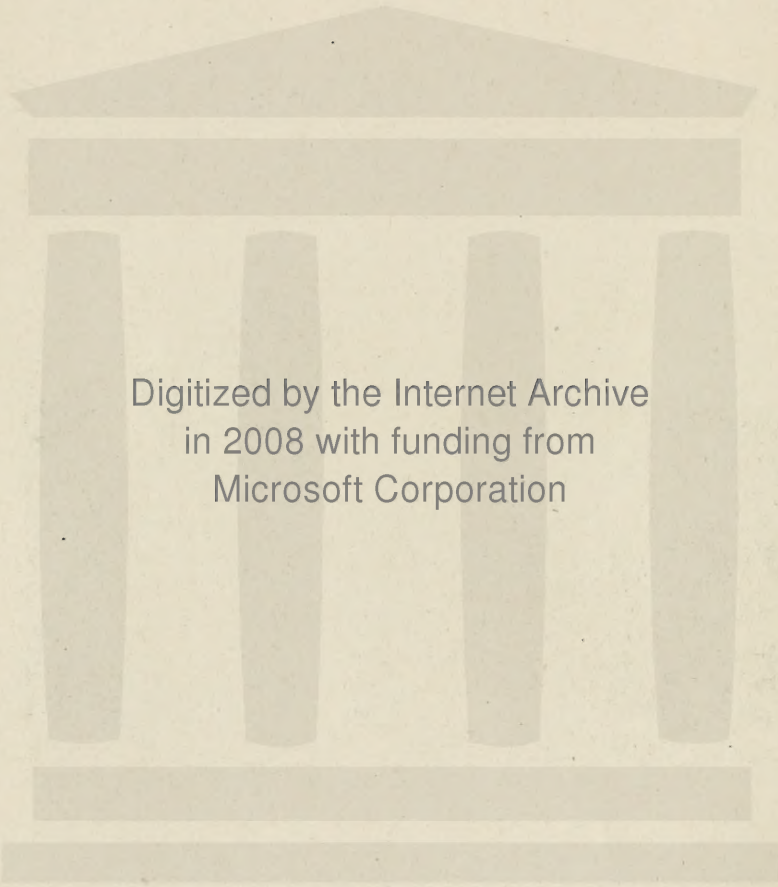
Note the depth of chest, the position of legs, and the clean cut head and neck.

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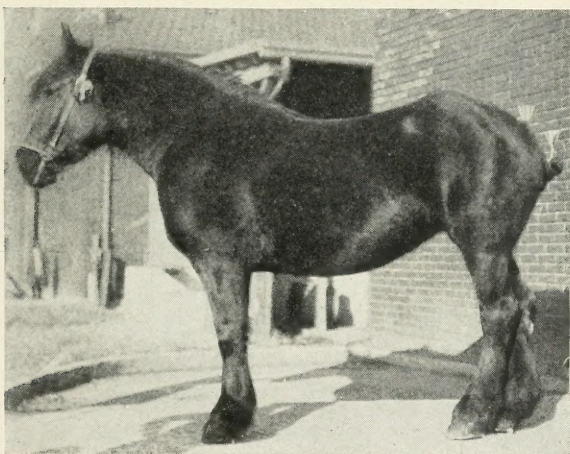
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# JUDGING OF DRAFT HORSES

BY W. H. PALMER

## INTRODUCTION

In taking up the study of any class of animals it is important to learn first, the purpose for which the class is being developed and second, the essential requirements that will fit an animal of the class best to fulfill its purpose. In the study of horses it is found that they can be grouped into five classes, each class possessing its own special requirements. The classes are (1) draft, (2) heavy harness, (3) light harness, (4) saddle, and (5) ponies. Under each class there may be sub-classes, (1) heavy, (2) medium, and (3) light.

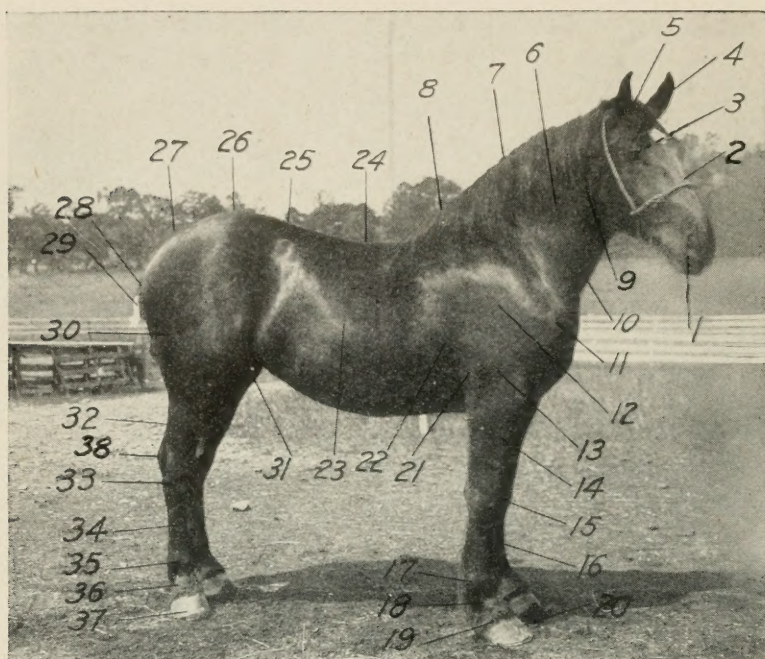


Shoulder and pasterns too straight and croup too sloping.

The draft horse is a heavy horse standing not less than  $15\frac{3}{4}$  hands in height and weighing not less than 1,600 pounds. The weight is due to the breadth and depth of body and to the heavy development of bone and muscle. He is developed for pulling heavy loads at a slow pace, and to perform this task economically, he must be developed along certain lines which tend for massiveness and strength.

In order to learn the special requirements of the different parts of a horse, a score card is often used. After a knowledge of these requirements and their relative importance is obtained, the student is able to proceed with comparisons and later with the actual judging of the draft horse. The use of the score card is not applicable to

show ring judging and sales selection. Its use helps to develop a mental picture of the horse best suited for draft purposes and is almost indispensable in the development of good judgment.



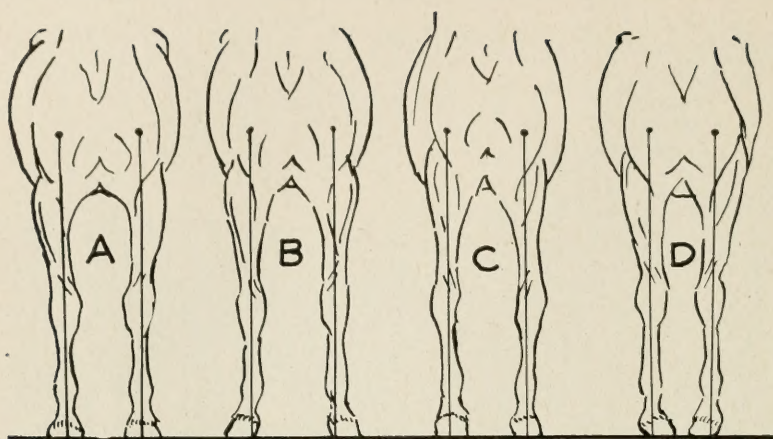
### PARTS OF HORSE

- |                            |                       |
|----------------------------|-----------------------|
| 1. muzzle.                 | 20. foot.             |
| 2. face.                   | 21. elbow.            |
| 3. eye.                    | 22. heart girth.      |
| 4. ear.                    | 23. ribs.             |
| 5. poll.                   | 24. back.             |
| 6. neck.                   | 25. loin.             |
| 7. crest.                  | 26. hips.             |
| 8. withers.                | 27. croup.            |
| 9. throat latch.           | 28. point of bullocks |
| 10. windpipe.              | 29. tail.             |
| 11. point of shoulder.     | 30. thigh.            |
| 12. shoulder.              | 31. stifle.           |
| 13. arm.                   | 32. gaskin.           |
| 14. fore arm.              | 33. hock.             |
| 15. knee.                  | 34. cannon.           |
| 16. cannon.                | 35. fetlock.          |
| 17. fetlock.               | 36. pastern.          |
| 18. pastern.               | 37. foot.             |
| 19. hoof head, or coronet. | 38. point of hock.    |

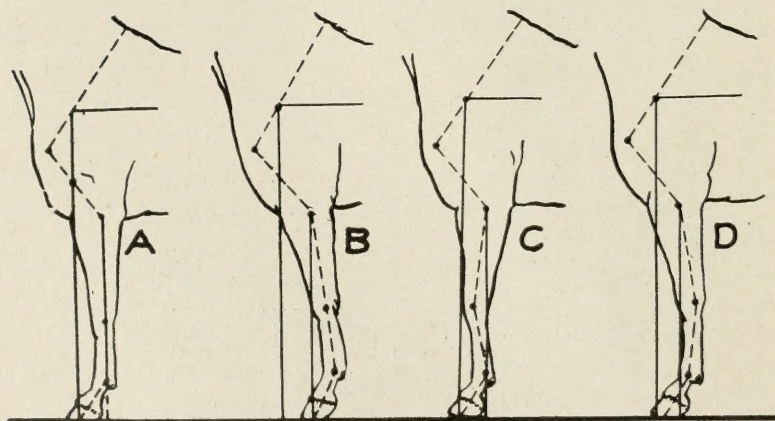
The following score card is one used by the Ohio State University for draft horses:

# SCORE CARD FOR DRAFT HORSES

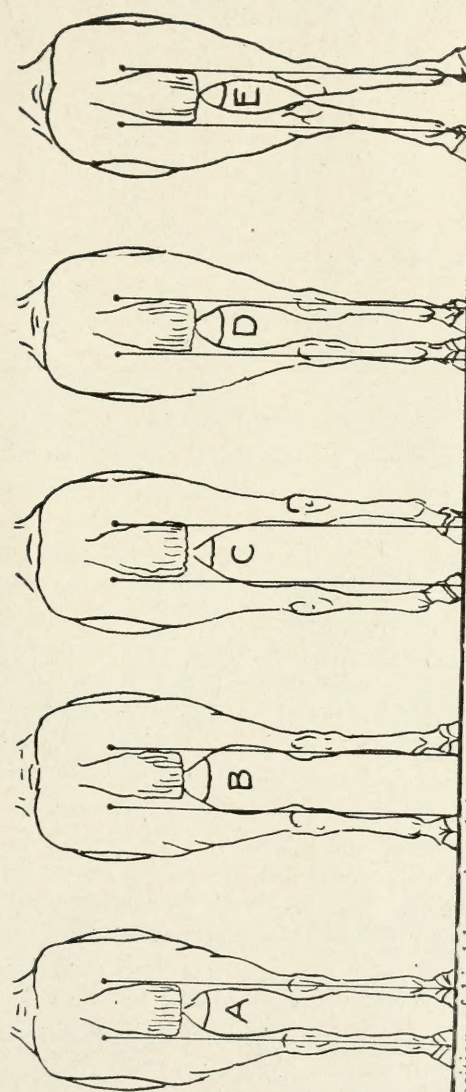
|                                                                                                                                                                                                                                                                                                                                                                                       | Scale of Points | Perfect Score | Student's Score |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|---------------|-----------------|
| 1. Age .....                                                                                                                                                                                                                                                                                                                                                                          |                 |               |                 |
| <b>GENERAL APPEARANCE; 16 POINTS</b>                                                                                                                                                                                                                                                                                                                                                  |                 |               |                 |
| 2. Height .....                                                                                                                                                                                                                                                                                                                                                                       |                 |               |                 |
| 3. Weight: 2000 lbs. .... score according to age, ....                                                                                                                                                                                                                                                                                                                                |                 | 4             |                 |
| 4. Form: low set, broad, deep, massive, proportioned, ....                                                                                                                                                                                                                                                                                                                            |                 | 4             |                 |
| 5. Quality: general refinement and finish, clearly defined features of head, cleanness of bone and joints, fineness of skin and hair, ....                                                                                                                                                                                                                                            |                 | 4             |                 |
| 6. Temperament: energetic, good disposition, ....                                                                                                                                                                                                                                                                                                                                     |                 | 4             |                 |
| <b>HEAD AND NECK; 6 POINTS</b>                                                                                                                                                                                                                                                                                                                                                        |                 |               |                 |
| 7. Head: lean, medium size, ....                                                                                                                                                                                                                                                                                                                                                      |                 | 1             |                 |
| 8. Muzzle: fine; nostrils large; lips thin, even, trim, ....                                                                                                                                                                                                                                                                                                                          |                 | 1             |                 |
| 9. Eyes: full, bright, clear, large, prominent, ....                                                                                                                                                                                                                                                                                                                                  |                 | 1             |                 |
| 10. Forehead: broad, full, ....                                                                                                                                                                                                                                                                                                                                                       |                 | 1             |                 |
| 11. Ears: medium size, well carried, ....                                                                                                                                                                                                                                                                                                                                             |                 | 1             |                 |
| 12. Neck: muscled, crest high, throatlatch fine, windpipe large, ....                                                                                                                                                                                                                                                                                                                 |                 | 1             |                 |
| <b>FOREQUARTERS; 25 POINTS</b>                                                                                                                                                                                                                                                                                                                                                        |                 |               |                 |
| 13. Shoulders: sloping, smooth, snug, extending into back, ....                                                                                                                                                                                                                                                                                                                       |                 | 2             |                 |
| 14. Arm: short, thrown forward, ....                                                                                                                                                                                                                                                                                                                                                  |                 | 1             |                 |
| 15. Forearm: heavily muscled, long, wide, ....                                                                                                                                                                                                                                                                                                                                        |                 | 2             |                 |
| 16. Knees: wide, clean cut, straight, deep, ....                                                                                                                                                                                                                                                                                                                                      |                 | 2             |                 |
| 17. Cannons: short, broad, lean; tendons large, set back, ..                                                                                                                                                                                                                                                                                                                          |                 | 2             |                 |
| 18. Fetlocks: wide, straight, strong, ....                                                                                                                                                                                                                                                                                                                                            |                 | 1             |                 |
| 19. Pasterns: oblique, strong, ....                                                                                                                                                                                                                                                                                                                                                   |                 | 3             |                 |
| 20. Feet: large, round, uniform in size, straight; slope parallel to pastern; horn dense, smooth; bars strong; frog large; heel wide; height at heel one-half height at toe, ....                                                                                                                                                                                                     |                 | 8             |                 |
| 21. Legs: viewed from in front, a perpendicular line dropped from the point of the shoulder should divide the leg and foot into two lateral halves; a perpendicular line dropped from the prominence on the shoulder blade should pass thru the center of the elbow joint and meet the ground at the center of the foot, ....                                                         |                 | 4             |                 |
| <b>BODY; 9 POINTS</b>                                                                                                                                                                                                                                                                                                                                                                 |                 |               |                 |
| 22. Chest: deep, wide, low, large girth, ....                                                                                                                                                                                                                                                                                                                                         |                 | 2             |                 |
| 23. Ribs: long, close, well sprung, ....                                                                                                                                                                                                                                                                                                                                              |                 | 2             |                 |
| 24. Back: straight, broad, short, ....                                                                                                                                                                                                                                                                                                                                                |                 | 2             |                 |
| 25. Loin: wide, short, thick, strong, ....                                                                                                                                                                                                                                                                                                                                            |                 | 2             |                 |
| 26. Underline: flank low, ....                                                                                                                                                                                                                                                                                                                                                        |                 | 1             |                 |
| <b>HINDQUARTERS; 34 POINTS</b>                                                                                                                                                                                                                                                                                                                                                        |                 |               |                 |
| 27. Hips: smooth, wide, ....                                                                                                                                                                                                                                                                                                                                                          |                 | 2             |                 |
| 28. Croup: long, level, wide, muscular, ....                                                                                                                                                                                                                                                                                                                                          |                 | 2             |                 |
| 29. Tail: attached high, well carried, ....                                                                                                                                                                                                                                                                                                                                           |                 | 1             |                 |
| 30. Thighs: muscular, ....                                                                                                                                                                                                                                                                                                                                                            |                 | 2             |                 |
| 31. Quarters: deep, heavily muscled, ....                                                                                                                                                                                                                                                                                                                                             |                 | 2             |                 |
| 32. Gaskins: wide, muscled, ....                                                                                                                                                                                                                                                                                                                                                      |                 | 2             |                 |
| 33. Hocks: clean cut, wide, deep, straight, smooth, point prominent, well supported below, ....                                                                                                                                                                                                                                                                                       |                 | 8             |                 |
| 34. Cannons: short, wide; tendons large, clean, set back, ..                                                                                                                                                                                                                                                                                                                          |                 | 2             |                 |
| 35. Fetlocks: wide, straight, strong, ....                                                                                                                                                                                                                                                                                                                                            |                 | 1             |                 |
| 36. Pasterns: oblique but strong, ....                                                                                                                                                                                                                                                                                                                                                |                 | 2             |                 |
| 37. Feet: large, round, uniform in size; straight; slope parallel to pastern; horn dense, smooth; heel wide; height at heel one-third height at toe, ....                                                                                                                                                                                                                             |                 | 6             |                 |
| 38. Legs: viewed from the rear, a perpendicular line dropped from the point of the buttock should divide the leg and foot into lateral halves; viewed from the side, this line should touch the point of the hock and meet the ground some little distance back of the heel. A perpendicular line dropped from the hip joint should meet the ground midway between heel and toe, .... |                 | 4             |                 |
| <b>ACTION; 10 POINTS</b>                                                                                                                                                                                                                                                                                                                                                              |                 |               |                 |
| 39. Walk: true, smooth, quick, long, balanced, elastic, ....                                                                                                                                                                                                                                                                                                                          |                 | 6             |                 |
| 40. Trot: rapid, regular, ....                                                                                                                                                                                                                                                                                                                                                        |                 | 4             |                 |
| Total .....                                                                                                                                                                                                                                                                                                                                                                           |                 | 100           |                 |



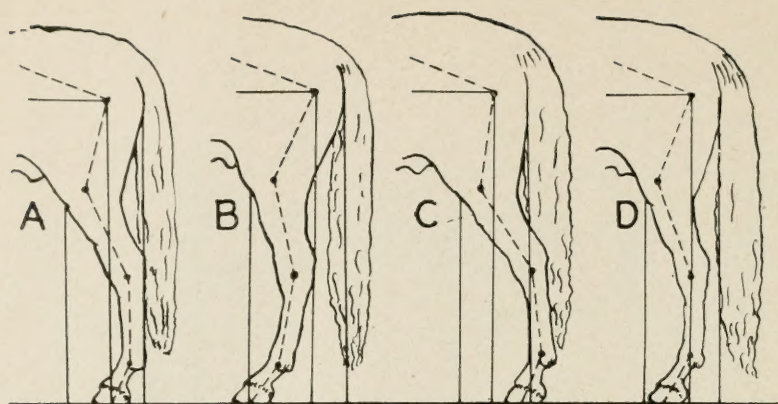
Position of front legs, viewed from in front. A, proper set; B, toe wide; C, too wide; D, toe narrow.



Position of front leg, viewed from side. A, proper set; B, leg too far back; C, knee sprung, buck kneed; D, position in calf kneed.



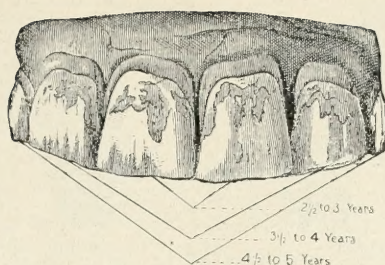
Position of hind legs viewed from behind. A, proper set; B, too wide; C, too close at hocks and fetlocks and toes pointing in; D, too narrow; E, cow hocked, too close at hocks and too wide at toes.



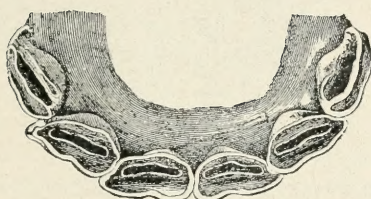
Position of hind legs viewed from side. A, proper set; B, sickle hocks; C and D, too straight; C, line dropped from buttocks falls in front of point of hock and in D it falls back of point of hock.

### GENERAL APPEARANCE

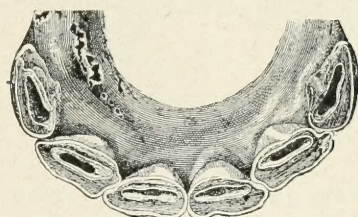
**Age.**—The first item on the score card is age. The age of a horse is determined by his teeth; by the time that they appear and by the disappearance of what are known as the “tables”, or “cups”. The first set of teeth is known as the milk teeth, the center pair of which will be found in the colt’s mouth at birth or a few days after. The intermediate pair will appear when the colt is from 6 to 9 weeks old and the corner pair at from 7 to 9 months. The permanent teeth are larger and broader than the milk teeth and appear at about 2½ years of age and are up in full wear at 3 years. The next pair when up in wearing indicate 4 years of age, and the corner pair appear at about 4½ years and are up in full wear at 5 years. At 5 years, what are known as the “tusks” are full size. After 5 years, the age is determined by the disappearance of the tables, or cups. At 6 years of age the tables have practically disappeared from the center pair of incisors below. At 7 years the “swallow tail”, or nick, in each of the corner incisors appear and the cups have disappeared from the intermediate incisors below. At 8 years, the cups have practically disappeared from the corner incisors. At 9 years, the cups are gone from the middle incisors above; at 10 years, from the intermediate pair; and at 11 years, from the corner pair above. After 11 years, it is very difficult to make any further estimate of age with any degree of accuracy. As the horse grows older the teeth become more triangular and join the jaw at a greater angle.



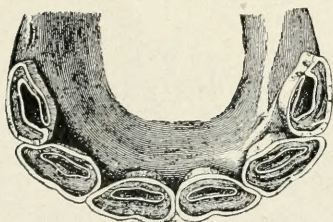
Sketch showing the order in which the pairs of permanent incisors appear.



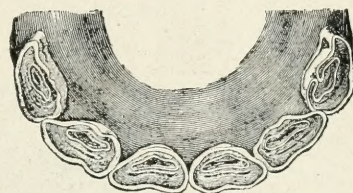
Lower jaw at 5 years.



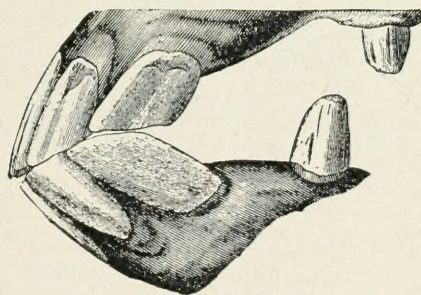
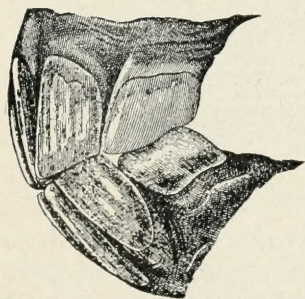
Same at 6 years.



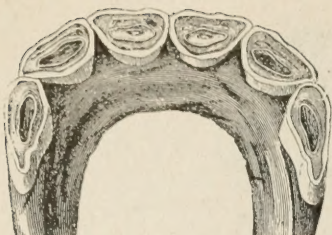
Lower jaw at 7 years.



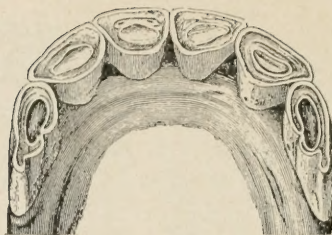
Same at 8 years.



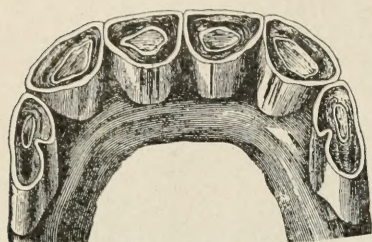
Mouth at 5 years and at 21 years.



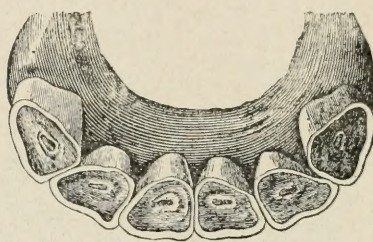
Upper jaw at 9 years.



Upper jaw at 10 years.

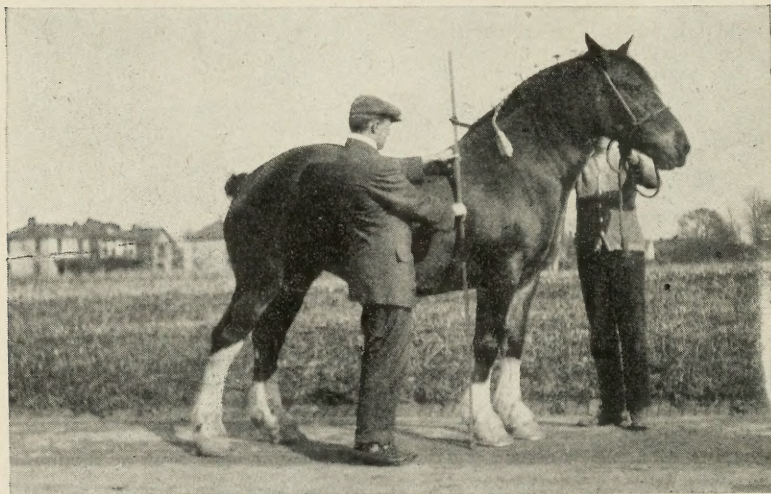


Upper jaw at 11 years.



Lower jaw at 15 years.

**Height.**—The height of a horse is measured in hands and inches. For example, the height of a horse may be given at 16-2, measuring 16 hands and 2 inches, or it may be given as  $16\frac{1}{2}$  hands.



Proper method of measuring height of horse.

Draft horses stand at least  $15\frac{3}{4}$  hands high; 18 hands possibly would be the upper limit, for at that height it is difficult to get the proper proportions in conformation. The most desirable height is from  $16\frac{1}{2}$  to  $17\frac{1}{2}$  hands.

The measurement for the height of horses is taken at the withers. When accurate height is required a measuring stick, marked in hands and inches is used. Where this is not available a fairly accurate estimate may be made by learning the height of one's body to the point of the chin or the line of the eyes. Then by standing at the side of the horse on a level with his front feet one can estimate how much higher the top of the withers are than his chin or his eyes.

**Weight.** — In order to classify as a draft horse, the animal in fair flesh must weigh at least 1,600 pounds. The nearer the horse approaches a ton or over the better. This weight should be due to massiveness of form and heavy frame and muscle rather than to a great quantity of fat. As has been indicated before, there are three classes of draft horses: light drafters, 1,600 pounds to 1,700 pounds; medium drafters, 1,700 pounds to 1,850 pounds; and heavy drafters, 1,850 pounds and over.

Weight in the draft horse is of great importance. It is of value because it helps to establish the value of the drafter on the market. The heavy drafters have for many years brot the most money. Also, weight is of value for it holds the horse's feet firmly to the ground enabling him to exert his physical force. The railroads have taken advantage of this in building the locomotive. In the early stages of the development of the locomotive, before it was introduced as a means of transportation, the inventor had a great deal of trouble in getting the engine started for the wheels would not adhere to the rails. It was thot that there should be cogs on the wheels and rails. By accident, it is said, they found the solution. In attempting one day to move some material in sacks down the track, part of the sacks were placed across the engine. This added weight caused the wheels to grip the rails and the difficulty was solved. The man who rides one of his horses up a difficult hill applies the same principle.

The process of walking is a constant falling forwards and the heavier the weight that falls against the collar the greater the pull.

It has been clearly demonstrated that if a horse is required to exert for a considerable length of time a pull of more than from one-tenth to one-eighth of his weight it is wearing upon his constitutional vigor and therefore affects his usefulness. At the minimum requirement, a team of 1,800-pound horses would develop 3 horse power, but a team of 1,400-pound horses would only develop about 2 horse power.

**Form.** — The form of draft horses must be such as to insure weight. The weight should be obtained by breadth and depth of body and a heavy development of muscles on the arms and forearms, over the back and thru the thighs. This heavy development of muscle helps to give the appearance of massiveness. The draft horse must give the impression of strength, a horse of great power. In order to be efficient.



Desirable type. Note height of withers, smoothness of shoulder, and shortness and breadth of back and loin.

drafters must carry their weight close to the ground, or, in other words, drafters must be low set. Too short a leg is as objectionable as too long a leg, as it affects the efficiency of a horse.

Lack of depth of body, ranginess, openess, too great a length of leg, and lightness of muscling thruout the body are things to be



Desirable draft farm mare. Note quality and effeminate character.

criticised severely. These deficiencies detract from the weight and strength, and, therefore, affect the efficiency of the horse.

**Quality.**—Quality in horses is an indication of “wearing” ability. Not being correlated with substance it is difficult of attainment in draft horses, but the tendency is toward as much quality as possible with substance. Quality is indicated by the general refined appearance of an animal, clean-cut features of the head, thin even lips, fine ears, neatness and refinement of neck and withers, soft silky hair, thin skin, and a clean dense bone with a freeness from puffness around the joints. Upon the uniform quality of all parts of the horse depends his value and length of time he will be of service.

**Temperament.**—The draft horse must be energetic, showing sufficient nervous development to make him a willing worker. A sluggish disposition is to be avoided. There must be sufficient “snap” about a horse for him to pick his feet up with a will and to move off as if he meant business. Sluggishness is indicated by a lack of poise, by a slouchiness about the ears, and in the manner of standing. A good disposition is important as it affects the ease of handling and working of a horse. It is desired that a horse perform his work willingly and that he attends to his own business.

## HEAD AND NECK

**Head.**—The head should be in proportion to the rest of the body and all the features, clean cut. A straight face is to be preferred to a tendency to Roman. The angle of the lower jaw should be wide, as narrowness here may have a tendency to affect the breathing apparatus by pinching the windpipe when the horse is reined up. The head should be attached to the neck neatly and so set on that it can be carried gracefully and give an attractive appearance.

**Muzzle.**—The muzzle should be broad with the nostrils large but not dilated. If they are dilated it is a sign of impaired respiration. The lips should be thin and carried evenly. A loose pendent underlip is unsightly and in young animals, indicates a lack of proper nervous development and control. Examination should be made to see that the teeth come together properly. Sometimes the lower jaw is longer than the upper and vice versa.

**Eyes.**—The eyes should be large, full, bright, clear, and active and set out on the corners of the head. Bright and clear eyes indicate proper circulation of blood. The eyelids should be thin and nicely curved. A break in the curve indicates that the eye has been inflamed at some time.

**Forehead.**—In any horse the forehead should be broad and full, thus giving the greatest possible chance for the development of

the brain of the horse. Narrow, dished or bulging forehead are faults to be guarded against as they detract from the appearance and decrease the usefulness of a horse.

**Ears.**— The ears are to top the head — to finish the head — hence, should be carried up well to the top, or poll. They should be medium in size, nicely shaped and pointed, and well carried. An ear placed on the side of the head and meanly carried is objectionable.



Proper set of head and neck to shoulders.

**Neck.**— The neck of a draft horse should be of fair length, heavily muscled, but not thick. It should be placed into the shoulders with a long attachment and in such a manner that the horse can get its head up. There should be a slight arch or crest at the upper edge. There should not be a heaviness and thickness at the throat latch, as this affects the carriage of the head and also may

by pressing on the windpipe affect the wind when the horse is reined up. The windpipe should be large.

## FOREQUARTERS

**Shoulder.**— The shoulder should be knit into rather than be stuck on the corner of the body. The shoulder should not only slope toward the rear but toward the median plane of the body, producing a smooth shoulder and more or less high and refined wither. Flatness and openness at the withers are objectionable. The shoulders should have a slope of approximately fifty degrees with the horizontal. Straight shoulders affect the stride while on more sloping shoulders the collar tends to slip up and shut off the wind.



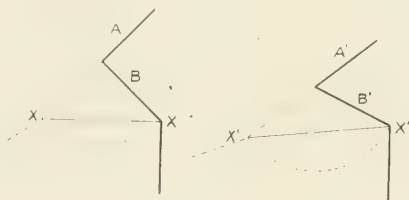
Showing slope of shoulder.

Objectionable features are roughness, straightness, and shoulders set on the corners of the body giving too much of the appearance of a bull-dog front. The rough angular shoulder is more liable to become sore and unsound than the smooth

snug shoulder. Upright shoulders and pastures are indicative of a short, stubby, undesirable way of going.

**Arm.** — The point of the shoulder should be carried well forwards. The arm should be heavily muscled, short, lying nearly in a horizontal plane, and the elbow carried in. With the shoulder too loosely set, it is difficult to have the arm carried close enough so that there is not a rolling and spraddling of the legs in action.

From the accompanying drawing an idea is obtained of how the slope of shoulder and arm affects the stride of the horse.



A and A' represents the shoulder blade, B and B' the arm bone, and X and X' the elbow. With a straight shoulder, as at A, when the horse steps the arm B would only swing thru the arc XX while the sloping shoulder, as at A', the arm B' would move thru the arc X'X' which is much longer than arc XX, hence a longer and freer stride.

**Forearm.** — The forearm should be of fair length and its prominence should be due to a large bunch of muscle which gives the horse complete control of his legs. This muscling should be confined to the upper one-half and not run down on the knees. Proper development of the muscles gives the wide, well defined appearance desired. Lightness of muscles in this region indicate lightness of muscles thruout the horse, therefore, weakness.



Buck knee.

**Knee.** — A broad, well defined knee, with no shrinking, or cutting in, just below it is desired. When viewed from in front the knee should show good breadth at the top with the breadth carried well downwards. When viewed from the side, there should be plenty of depth, with no decided cutting in below. A round or egg-shaped appearance when viewed from in front is undesirable. The tendon should stand out well behind. A tied-in appearance below and at the back of the knee indicate weakness. There should be a clean-cut appearance to the knee; meatiness and puffiness are objectionable as they affect the efficiency of the knee joint.

**Cannon.**—The region of the cannon consists of the cannon bone and the tendons running down the back of the bone. This region should be short and flat, with the tendons well defined; short because it brings the power of the muscles of the forearm closer to their load, the feet, and improves action. The cannon bone should be large and free from roughness. This region gets its flat appearance by the setting back of the tendons. Roundness, and coarseness, or lack of substance (size) are objectionable.

**Fetlock.**—The fetlock joint should be broad, wide, free from puffiness, strong, and well supported below. Broad when viewed from the side, because, as at the knee, the big tendon that picks up the foot is given greater purchase.

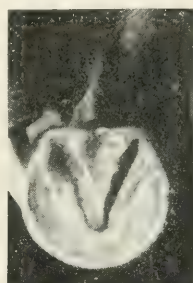
**Pastern.**—The pastern is between the fetlock and the hoof and should be of medium length, strong and smooth, and a line showing its slope should form an angle of 45 degrees with the ground. Too straight pasterns affect the efficiency of a horse, for in walking or trotting or other movement the shock to the foot is much greater in the case of a straight pastern than with a sloping pastern. These shocks tend to produce foot troubles and unsoundness such as sidebones, ringbones, navicular disease, and stiffness. With the sloping pastern the bones are so arranged that the shock is evenly distributed. Upright pasterns in a mature horse tend to become more so with age. Pasterns with too much slope are weak and liable to break down as the horse grows old or under stress of work.



Straight, stubby  
pastern.

**Feet.**—As sound feet are rather the exception and are very important structures, considerable attention should be directed to them. The foot is made up of three bones covered by a highly sensitive secreting layer and an external horny surface made up of the wall, sole, and frog. The foot should be round or nearly so with the wall at each quarter having the same slope and the height at the heel should be one-half the height at the toe. With more height than this at the heel there is a great tendency toward contraction of the heels. With less height than suggested, the wall of the foot strikes the ground at too great an angle causing a breaking of the horn. The horn should be very waxy in appearance and show density. It should be free from cracks running up and down and from ridges or wrinkles running around the hoof. The hoof head, or coronet, should be wide and open.

On the bottom of the foot will be noticed a triangular part at the rear called the frog. It is there to take up the shock and hence should be large and more or less elastic. A dry, hard, and shrunken frog is very objectionable. The wall folds in at the heels and forms what are known as bars. These act as a spring to keep the heel open and should, therefore, show up large and strong.



Small feet. Note the irregular shape and the narrow heel and frog.

Good feet. Note roundness, uniformity of walls, and breadth of heel.

**Legs.** — For the horse to be an efficient and lasting individual it is important that he be put together properly. If a plumb line is dropped from the point of the shoulder to the ground it should, when viewed from the front, divide the leg and foot into lateral halves. If it does not, then some part is taking more wear than it should and diseased conditions may develop. Splints and side bones, especially the latter, are caused by an unequal distribution of the load. When viewed from the side, a plumb line dropped from the prominence on the shoulder blade should pass thru the center of the elbow joint and meet the ground at the center of the foot.



Narrow thru chest. Legs too close together.



Good width thru chest. Legs properly placed.

## BODY

**Chest.** — The chest should be wide and deep, giving plenty of room for the development of lungs and heart. There should be good breadth between the fore legs with a fullness in the breast. The heart girth is the circumference around the body just back of the shoulders. The amount of fat affects this measurement, but the breadth and depth of the chest must be obtained by the spring and length of rib rather than by fat.

**Ribs.** — The ribs should spring from the back in a bold curve and be of a good length, giving to the barrel, or body, of the horse breadth and depth. The hind ribs should be long giving a fullness in the hind flank. The whole idea is to have developed a good roomy body. Lack of spring of ribs and shortness of the back ribs, when accompanied by a long open coupling and lightness of muscling over loin and back, indicate a poor worker and a hard keeper.

**Back.** — When it is remembered that practically all the muscular power of the horse is developed in the hind quarters and in order to reach the collar it must go thru the backbone and that one can push harder on a straight, short, broad stick than on a long, narrow, crooked one, the requirements of a good back are easily understood. The straight, broad, short back is the strong back.

**Loin.** — The loin is frequently referred to as the coupling and to the region over the kidneys. This region should be broad, carry-

ing the width of the back to the hips. It should be short and heavily muscled, indicating strength. A slight elevation over the loin due to heavy muscular development is not objectionable tho it detracts from the symmetry. Care should be taken not to confuse excessive fat over this region with heavy muscling.

**Underline.**—The flanks, both fore and hind, should be full and carried down well. Lightness of the fore flanks indicates lack of proper constitutional vigor and lightness in the hind flanks produces the condition known as “waspwaisted”. Waspwaisted horses lack staying qualities.

## HINDQUARTERS

**Hips.**—The hips of draft horses should be wide and smoothly laid in and deeply covered with flesh. Roughness across the hips with a prominent hip bone is undesirable, as it indicates lack of quality.

**Croup.**—The first requirement for a desirable croup is that of length from the point of the hips to the end of the buttocks. The



Long straight croup.

width that is formed across the hips should be carried well toward the end of the buttocks and there should be a straightness or levelness of the croup. Some horses appear as if they had been struck with a board across the croup. It is the muscling of the hindquarters that furnish the power of a horse, consequently, it is important to have the croup and thighs developed so as to have the largest amount of muscle. This calls for a long, broad, and fairly straight croup.

**Thigh.**—It is desired to get as much muscular development in this region as possible, consequently, length from the point of the hip to the lower back part of the thigh is to be sought as is also length from the point of the buttock to the stifle with a strong development of the muscles in the stifle region. The muscles in the quarters, the region between the hind legs, should be large and strong. Standing behind the horse one should be impressed with the width and fullness of the thighs and quarters. It is a bad defect of a draft horse to be deficient in the muscling of the quarters and in the stifle region for it is from this region that he gets most of his power to pull.

**Gaskin.** — The gaskin is the region between the thigh and the hock. It should be broad and thickly muscled. It is this region and that of the forearm that gives a fair idea of the natural muscling of a fat horse for these regions cannot be covered with fat.

**Hock.** — This is the most important joint of the animal's body for it is by this joint that he lifts or pushes his entire load. The hock should be carefully examined, noting the breadth, the depth, and the cleancutness, or freeness from puffiness. This joint is made up of three bones, one on top of the other and bound together with ligaments. The hock should be clean cut, free from roughness, fleshiness, or puffiness. Swollen fingers are not so nimble as they were before becoming swollen. So a puffy, or meaty, hock is not so efficient as one that is clean cut. Puffiness and meatiness not only affects the efficiency, but also indicate coarseness which is not associated with durability. In looking at the hock it should appear wide, from in front and from the side. The point of the hock should be prominent giving great breadth to the upper part. The tendon leading from the point should be clean cut and not thick and meaty. The angle of the hock should be such that the line of force thru the large bone, tibia, above the hock should strike the center of the hock rather than falling back or in front of the center. If the angle is too large, it causes too great a strain on the ligaments of the back part of the hock. If these ligaments become torn or inflamed, "curb" results. This type of hock is called "sickle" or "curby" hock. The proper angle is determined by letting a plumb line drop from the point of the buttock to the ground. The point of the hock should touch this line and the cannon region from the hock down should be perpendicular and touch the line all the way to the fetlock. Soft, full, puffy, swollen, rounding, or crooked hocks are very undesirable and should be discriminated against.

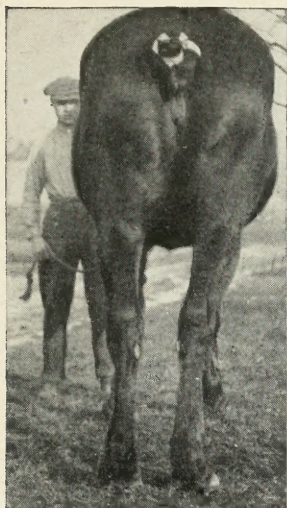
**Cannon.** — The hind cannon should be large and clean. The tendons should be set back, giving a flat appearance to this region. Lightness just below the hocks is very undesirable. Like the front cannon region it should be short.

**Fetlocks.** — This region, as in the forequarters, should be broad, wide, large, and strong and be free from puffiness or meatiness.

**Feet.** — The hind feet are not quite as round as in front, but they should be of good size. The wall at the inside and outside quarters should have the same slope. The height at the heel should be one-third the height at the toe. The horn should show denseness and toughness. The frog should be large and more or less elastic, the heels should be open and full. The sole should be concave and

the bars, which are formed by the infolding of the wall, should be prominent.

**Legs.**—The set of the hind legs should be such that, when viewed from behind, a plumb line dropped from the point of the buttock would divide the leg into two equal parts. When viewed from the side this same plumb would touch the leg from the point of the hock to the fetlock. Some of the common defects noted are too great width at the hock, narrowness at the fetlock with the toes pointing out and too great an angle of the hocks, or sickle hocks.



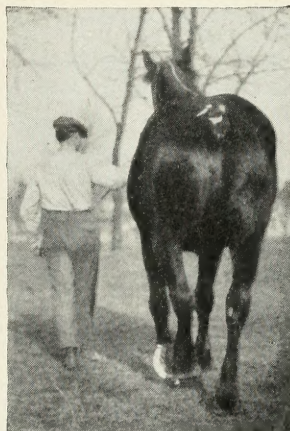
Good set of hind legs.

### ACTION

**Walk.**—The common working pace of the draft horse is the walk, hence it deserves especial attention. It is only occasionally that a draft horse is required to trot. The trot is a more rapid action than the walk and any defects noticed at the walk will be exaggerated at the trot. In examining the way of going, the horse should be seen as he comes toward you, as he passes, and as he is going away from you. He should carry his head up and step out good and strong, and with plenty of snap. The feet,



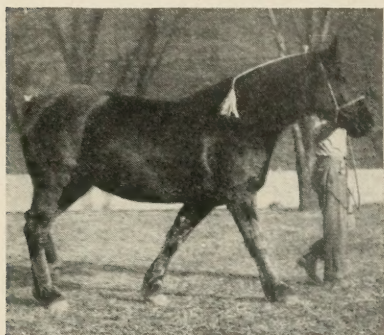
Coming.



Going.

As the horse comes toward you, note whether the feet are carried in a straight line and, as he goes from you, note how he picks up his feet and how he carries them forward. Also note the way the hocks are carried.

both fore and hind, should be carried in a straight line, as such a carriage not only saves time but energy. Defects to be noted in action are: **paddling**, which is a swinging out of the feet and is the result of a too narrow, or pigeon-toed, standing position; **winging**, which is exaggerated paddling; **winding**, which is a crossing over of the feet; and **rolling**, which consists of an excessive side motion of the shoulders. The feet should be picked up with a snap, carried forward in a straight line, and come to the ground in such a manner that the frog strikes first. There should be no stubbing of the toes into the ground. Viewed from the side,



Good long stride.

the stride should be of good length, regular, and show springiness, or elasticity. The height of stride does not need to be so great as in some other classes of horses. Height sufficient to get over ordinary obstructions is all that is necessary. Viewed from behind, the feet should be carried in a straight line, the hocks, close together, and the legs from the hocks down should be perpendicular. Carrying too wide at the hocks and swinging in or out at the feet are

objectionable. Straightness, length, and elasticity of stride with plenty of snap and balance are the desirable features in good draft horse action.

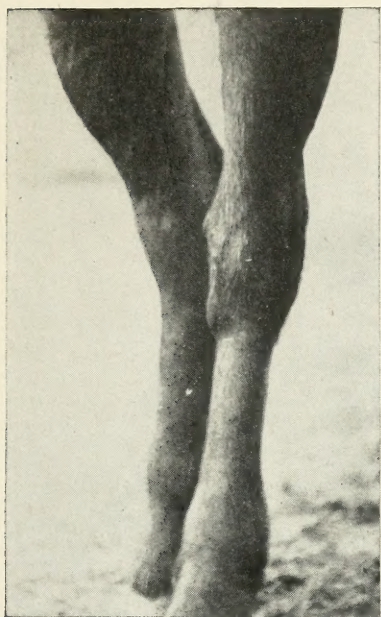
**Trot.** — In the trot, the same features as in the walk are looked for but the movement must be more rapid. Any defect noted at the walk will be brought out more distinctly at the trot. Professor Craig says, "The draft horse in trotting should go level, straight, and regular, for any deviation from these qualities are usually evidences of unsoundness or the absence of a balanced conformation." Straightness in the shoulder and pastern contribute to short shabby action which is undesirable.

## UNSOUNDNESSES

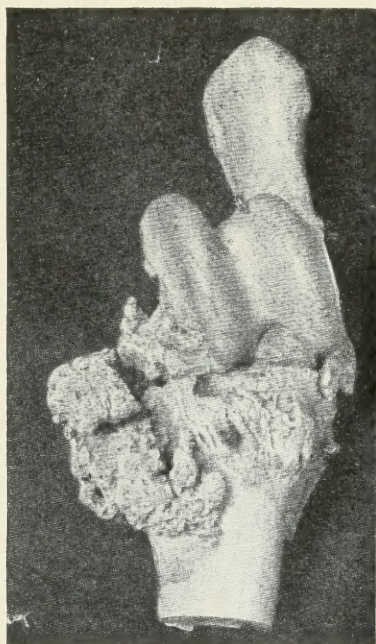
**Side Bones.** — Side bones are found generally on the front feet. They may be seen just at the top of the hoof above the quarters. Side bones are caused by inflammation resulting from bruising of the lateral cartilage or from improper set of legs. This inflammation results in a deposit of bone causing the cartilage to become hard.

**Bone Spavin.** — Bone spavin appears on the hock and is the deposit of bone tissue around the bones that make up the hock. It makes its appearance first at the lower inner part of the hock.

**Curb.** — Curb results from a sprain or tearing of the ligaments that bind the hock together causing an inflammation and later a de-



As it looks on the leg.



Bone spavin.

As it looks on the bone.



Sickle or curby hock.

posit of bone. It appears on the back edge of the hock just above the point where the hock joins the cannon region.

**Bog Spavin.** — Is a soft puffiness on the front part of the hock.

**Splints.** — Splints are caused by a deposit of bone tissue uniting the splint bones to the cannon bone. Generally found on the front legs. Usually caused by an inflammation resulting from a bruise.

**Ringbone.** — Ringbone is found on the pastern just above the hoof and is caused by a deposit of bone around the pastern joint and on the pastern.